

EXHIBIT F-4 Hazardous Waste Burning Room Inspection Form (Daily - when in use.)

(continued)

Revised 10/23/92

INSPECTION ITEM	POTENTIAL PROBLEMS	STATUS (Acceptable or Unacceptable)	REMARKS OR OBSERVATIONS	REMEDIAL ACTIONS NECESSARY	DATE REMEDIAL ACTIONS PERFORMED
Fire Extinguisher in the Burning Room & outside Burning Room	Extinguisher missing from area or damaged In need of recharging difficult to access				
* Hazardous waste drum satellite accumulation point at monitoring Well #2S (S.E. corner of old landfill) *Weekly inspection	Label missing, label illegible, improperly labeled. Drum leaking, corroded, lid missing or unbolted.		<u>NOT APPLICABLE - drum disposed of 2/19/91</u>		

CWM Profile Number:

1. Is this waste a non-wastewater or a wastewater? (See 40 CFR 268.2) Check ONE: ☒ Non-Wastewater ☐ Wastewater
2. If this waste is subject to any California List restrictions enter the letter from below (either A or B2) next to each restriction that is applicable: HOCs, PCBs, Acid, Metals, Cyanides.
3. Identify ALL USEPA hazardous waste codes that apply to this waste shipment, as defined by 40 CFR 261. For each waste code, identify the corresponding subcategory, or check NONE if the waste code has no subcategory. Also check which treatment standards apply. Spent solvent and California List treatment standards are listed on the back of this form. If F039, multi-source leachate applies, those standards must be attached by the generator.

R E P O	4. US EPA HAZARDOUS WASTE CODE(S)	5. SUBCATEGORY ENTER THE SUBCATEGORY DESCRIPTION IF NOT APPLICABLE SIMPLY CHECK NONE		6. APPLICABLE TREATMENT STANDARDS			7. HOW MUST THE WASTE BE MANAGED ENTER THE LETTER FROM BELOW
				6.2 - PERFORMANCE-BASED: CHECK AS APPLICABLE			
		DESCRIPTION	NONE	268.41(a)	268.41(a)	268.42	
1	D005		X	X			A
2							
3							
4							
5							
6							
7							
8							
9							
10							

To list additional USEPA waste code(s) and subcategory(s), use the supplemental sheet provided (CWM-3001-B) and check here: ☐

HOW MUST THE WASTE BE MANAGED? In column 7 above, enter the letter (A, B1, B2, B3, C, or D) below that describes how the waste must be managed to comply with the land disposal regulations (40 CFR 268.7). Please understand that if you enter the letter B1, B2, B3, or D, you are making the appropriate certification as provided below.

A. RESTRICTED WASTE REQUIRES TREATMENT

This waste must be treated to the applicable treatment standards set forth in 40 CFR Part 268 Subpart D, 268.32, or RCRA Section 3004(d).

B.1 RESTRICTED WASTE TREATED TO PERFORMANCE STANDARDS

"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based upon my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the performance levels specified in 40 CFR part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d) without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

B.2 RESTRICTED WASTES FOR WHICH THE TREATMENT STANDARD IS EXPRESSED AS A SPECIFIED TECHNOLOGY (AND THE WASTE HAS BEEN TREATED BY THAT TECHNOLOGY)

"I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.42. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

B.3 GOOD FAITH ANALYTICAL CERTIFICATION - FOR INCINERATED ORGANICS

"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by incineration in strict accordance with 40 CFR Part 268 Subpart D or Part 268 Subpart O, or by combustion in fuel substitution units operating in accordance with applicable technical requirements, and I have been unable to detect the nonwastewater organic constituents despite having used best good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

C. RESTRICTED WASTE SUBJECT TO A VARIANCE

This waste is subject to a national capacity variance, a treatability variance, or a case-by-case exemption. Enter the effective date of prohibition in column 7 above.

D. RESTRICTED WASTE CAN BE LAND DISPOSED WITHOUT FURTHER TREATMENT

"I have determined that this waste meets all applicable treatment standards set forth in 40 CFR Part 268 Subpart D, and all applicable prohibition levels set forth in Section 268.32 or RCRA Section 3004(d), and therefore, can be land disposed without further treatment. A copy of all applicable treatment standards and specified treatment methods is maintained at the treatment, storage and disposal facility named above. "I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting false certification, including the possibility of a fine and imprisonment."

I hereby certify that all information submitted in this and all associated documents is complete and accurate, to the best of my knowledge and information.

Signature

Title

Date

ATTACHMENT #5

MATERIAL SAFETY DATA SHEET

I. IDENTIFICATION

Name: PARTS KLEAN SOLVENT
Type: A FORMULATED DEGREASER
D.O.T
Shipping Name: N/A
Hazard Class: N/A
ID No.: N/A
Label: N/A

II. HAZARDOUS INGREDIENTS

Material	Weight	TLV
ALIPHATIC PETROLEUM DISTILLATES (CAS #64742-88-7)	< 95%	100 PPM
AROMATIC PETROLEUM DISTILLATES (CAS #64742-95-8)	< 5%	100 PPM PEL

THIS MATERIAL MAY CONTAIN 1% NAPHTHALENE (CAS #91-20-3), WHICH HAS A PEL TLV OF 10 PPM, STEL OF 15 PPM AND 1,2,4-TRIMETHYLBENZENE (CAS #95-83-6), WHICH HAS A PEL/TLV OF 25 PPM. NAPHTHALENE AND 1,2,4-TRIMETHYLBENZENE ARE SUBJECT TO THE SARA SECTION 313 REPORTING REQUIREMENTS.

III. PHYSICAL DATA

Boiling Point (F°): 365 - 415°F
Specific Gravity (Water=1): 0.77
Volatile By Weight (%): 00
Weight Per Gallon: (pounds): 8.4 POUNDS
Solubility in Water: EMULSIFIABLE
pH: N/A
Appearance & Odor: LIGHT RED WITH MILD SOLVENT ODOOR

IV. FIRE & EXPLOSION HAZARD DATA

Flashpoint (F°) (Method Used): 145°F (C.O.C.); 142°F (T.C.C.)
Extinguishing Media: DRY FOAM, CARBON DIOXIDE, DRY CHEMICAL
Special Fire Fighting Procedures: FIREFIGHTERS SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS.
Unusual Fire & Explosion Hazards: NONE

V. HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE: INHALATION OF HIGH CONCENTRATIONS OF VAPOR CAN CAUSE HEADACHES AND NAUSEA. HARMFUL OR FATAL IF SWALLOWED. CAUSES EYE IRRITATION. PROLONGED CONTACT CAN CAUSE SKIN DRYNESS AND CHAPPING.

CHRONIC HEALTH EFFECTS: KIDNEY DAMAGE, ANEMIA

PRIMARY ROUTES OF EXPOSURE: INHALATION, SKIN

FIRST AID PROCEDURES:

If Swallowed: DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY.
If Inhaled: REMOVE PERSON TO FRESH AIR. IF SYMPTOMS PERSIST, CALL A PHYSICIAN.
If In Eyes: FLUSH EYES IMMEDIATELY WITH PLENTY OF COOL WATER FOR AT LEAST 15 MINUTES. IF IRRITATION PERSISTS, CALL A PHYSICIAN.
If On Skin: FLUSH WELL WITH WATER. WASH WITH SOAP AND WATER.

VI. REACTIVITY DATA

Stability: STABLE
Conditions to Avoid: DIRECT EXPOSURE TO HEAT AND OPEN FLAMES.
INCOMPATIBILITY (Materials to avoid): STRONG OXIDIZERS
Hazardous Decomposition Products: METHANE, CARBON DIOXIDE AND TRACES OF ALIPHATIC COMPOUNDS.

HAZARDOUS POLYMERIZATION WILL NOT OCCUR

VII. SPILL OR LEAK PROCEDURES

Steps To Be Taken If Material Is Released Or Spilled: ABSORB WITH VERMICULITE, SAND OR STATE OIL ABSORBENT AND DISPOSE OF SAFELY. FLUSH RESIDUE WITH DETERGENT AND WATER.
Waste Disposal Method: THIS MATERIAL DOES NOT MEET THE EPA RESOURCE CONSERVATION AND RECOVERY ACT DEFINITION OF A HAZARDOUS WASTE. DISPOSE OF LIKE YOU WOULD OTHER DRUMS OF INDUSTRIAL WASTE SOLVENT.

Follow All Federal, State and Local Regulations Regarding Waste Disposal

VIII. SPECIAL PROTECTION INFORMATION:

Eye protection and protective gloves are recommended any time your work with any concentrated industrial strength cleaning products.

Respiratory Protection: REQUIRED FOR USE IN CONFINED AREAS WITH NO VENTILATION.

Ventilation: SUFFICIENT TO STAY BELOW TLVs.

Protective Gloves: REQUIRED

Eye Protection: SPLASH PROOF SAFETY GLASSES

Other Protective Equipment: EYEWASH STATION OR CLEAN WATER SOURCE IN CASE OF ACCIDENTAL EYE CONTACT.

IX. SPECIAL PRECAUTIONS:

Precautions To Be Taken In Handling Storage: STORE IN A COOL DRY PLACE AWAY FROM HEAT, SPARKS OR OPEN FLAMES. AVOID APPLICATION ON HOT SURFACES. DO NOT HEAT. KEEP AWAY FROM OPEN FLAME. DO NOT REUSE EMPTY CONTAINERS. RETURN EMPTY DRUM TO DRUM RECONDITIONER OR DESTROY BY CRUSHING.

OTHER PRECAUTIONS: DANGER/HARMFUL OR FATAL IF SWALLOWED. CONTAINS PETROLEUM DISTILLATES. AVOID CONTACT WITH EYES, SKIN OR CLOTHING. COMBUSTIBLE. KEEP AWAY FROM HEAT AND OPEN FLAME. DO NOT USE ON HOT SURFACES. AVOID PROLONGED OR REPEATED BREATHING OF VAPOR. USE WITH ADEQUATE VENTILATION.

HMS RATING: HEALTH 1 FLAMMABILITY 2
REACTIVITY 0

Read and follow all label directions and precautions before using the product. These products are intended for industrial and institutional use only. Not intended for household use or resale.

KEEP OUT OF THE REACH OF CHILDREN

While we believe that the data contained herein is factual and the opinions expressed are those of qualified experts, the data are not to be taken as a warranty or representation for which the company assumes legal responsibility. They are offered solely for your consideration, investigation, and verification. Any use of these data and information must be determined by the user to be in accordance with applicable Federal, State, and Local laws and regulations.

HEALTH AND SAFETY INFORMATION (216) 861-7114
MAY 1990



P. O. BOX 209
1000 WARREN AVENUE
NILES, OHIO 44446
FAX 216/544-7796

May 8, 1991

EXPRESS MAIL

Mr. Mark Bergman
Environmental Scientist
Ohio Environmental Protection Agency
Division of Solid and Hazardous
Waste Management
Northeast District Office
2110 East Aurora Road
Twinsburg, Ohio 44087-1969

Subject: March 1991 Hazardous Waste Inspection
RMI Sodium Plant
OHD 000 810 242

Dear Mr. Bergman:

Enclosed are two copies of the response to your 4 April 1991 letter. I am pleased to be able to report that, as the result of a dedicated effort by the Sodium Plant management team and employees, RMI was able to correct both the outdoor storage of contaminated cell shells and the backlog of steel wool pad drums even more expeditiously than predicted.

In addition, we are providing a much more complete description of the cell wash room process and the sodium/calcium sludge drum process.

I would like to state again that, while there is no excuse for non-compliance, the hazardous waste situation in March at the Sodium Plant was the result of a combination of extraordinary events, and was not routine:

- The Sodium Plant experienced an unprecedented downturn in production.
- Recently there have been significant personnel changes in the Sodium Plant management and RMI Environmental Affairs.
- In mid-1990 the Sodium Plant began receiving sodium waste from the RMI Metals Plant. It was impossible to predict the difficulties which are presented by the mineral oil packing.



Mr. Mark Bergman
Subject: March 1991 Hazardous Waste Inspection
RMI Sodium Plant

May 8, 1991
Page 2

We would like to meet with you at your convenience as soon as you have reviewed the enclosed response. Please telephone to set-up a meeting or with any questions (216) 544-7688.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard L. Mason".

Richard L. Mason
Director
Environmental Affairs

Enclosures

cc: W. J. McCarthy
W. J. Schoenfeld
D. R. Micsky
D. P. Korb, Sodium Plant
E. Senra, Sodium Plant
B. Wright, Sodium Plant

RMI TITANIUM COMPANY

SODIUM PLANT

ASHTABULA, OHIO

RESPONSE TO

OHIO EPA RCRA INSPECTION LETTER

OF APRIL 4, 1991

May 1991

RMI GENERAL COMMENTS

RMI Titanium Company Sodium Plant (RMISP) produces pure metallic sodium and chlorine gas via the Downs electrolytic process. The Downs cells use an eutectic mixture of sodium chloride, calcium chloride and barium chloride as raw materials. Normal manufacturing conditions dictate a generally continuous process of starting new cells and taking equivalent numbers of older cells off line - a "start and pump" process. As late as September of 1990, the RMISP had an average of 87 Downs cells on-line. Soon there after, a dramatically decreased market for sodium and chlorine mandated a reduction in cells to an average of 56 by March of 1991. This rapid reduction of greater than 30 cells is the largest short term capacity reduction in memory which put unprecedented demands on housekeeping, maintenance and waste handling services at the RMISP.

Another complicating circumstance was the treatment of off-site sodium wastes from the RMI Titanium Company Metals Reduction Plant (RMIMRP) at the RMISP thermal treatment unit. The RMIMRP began shipping sodium waste to the RMISP in April, 1990. There are two waste streams, sodium impregnated steel wool pads soaked in mineral oil which is the larger volume and to a lesser extent sodium filled spool pieces. The RMIMRP sodium filled spoolpieces did not present a treatment problem; however, the sodium impregnated steel wool pads packed in mineral oil did present a significant difficulty. The primary problem was one of treatment time, ie. the steel wool pads take approximately eight hours to

RMI GENERAL COMMENTS (cont'd)

treat instead of an estimated one to two hours due to the presence of the mineral oil. This excessive time demand created a back log of steel wool pads and added to the operating demands placed on maintenance and waste handling services at the plant.

The above comments are not intended to excuse the RMISP non-compliance noted in the Inspection Letter. They are to make clear that the non-compliance is the culmination of a series of unique events and is not normal or routine.

DESCRIPTION OF VIOLATIONS:

1) UNPERMITTED ACTIVITIES

A) OEPA COMMENT: Storage of cell shells on the ground.

RMI RESPONSE: RMISP addressed this item a letter to OEPA (March 12, 1991, D.R. Micsky to OEPA, attachment #1) which stated in part:

"Another area of concern noted by Mark Bergman of the Ohio EPA was with empty cell cells from the Down's electrolytic cell process. Because of a downturn in production, more cells than normal have in recent weeks been taken out of service. When a cell is taken out of service, the cell is emptied of cell bath waste, the cells are then washed and the brick lining is removed. The cell bath waste contains Barium D005 and sometimes Lead D008. Because of the unusual number of cells being rapidly taken out of service, approximately 15 cell shells were moved to an outdoor storage area without being cleaned. To address this situation, RMI Sodium will immediately begin cleaning these cell shells before placing in storage. All cleaning of cell shells will be completed within 4 weeks."

To reiterate: only cell bath waste containing barium and possibly lead could have fallen onto the ground. It would not be

1) UNPERMITTED ACTIVITIES (cont'd)

expected that any sodium reactive waste would have been commingled with the cell bath waste. RMISP is pleased to report that all the above cell shells were cleaned of any residual cell bath waste by April 12, 1991. The soil area of concern was sampled on April 24, 1991 and RMISP will forward the results to the OEPA as soon as they are available.

See RELEASE OF HAZARDOUS WASTES TO THE SOIL, #11 below.

B) OEPA COMMENT: The cell parts maintenance Wash Tank Area is a potentially unpermitted treatment unit.

RMI RESPONSE: When a Downs cell is to be taken off-line, a number of activities occur. These include the removal of the collector and receiver; pumping the cell bath into scows for re-addition to other operating cells; removal of the top and bottom of the cell shell; removal of the cathode, anode and base; and distribution of the above equipment to appropriate maintenance areas. The Wash Tank Area does not treat equipment containing sodium wastes. This type of equipment: receivers, sodium riser pumps, valves etc. are first treated at the permitted thermal oxidation unit. It would be a severe health and safety problem to treat water-reactive sodium wastes in the Wash Tank Area. RMISP recognizes this fact as evidenced by two representative Safe Job Procedures (SJP's - attachment #2) that specifically call for thermal treatment of sodium wastes in receivers (SJP #2) and in sodium riser pumps (SJP #11) before this equipment is removed to the Wash Tank area. Minor sodium-type residues may occur from

1) UNPERMITTED ACTIVITIES (cont'd)

time to time on certain small pieces of equipment. These residues would predominately be as the oxide or peroxide form due to the prior handling in atmospheric conditions or at the thermal treatment unit.

For the following reasons RMISP does not believe the cell maintenance wash tanks to be treatment units:

- a. Equipment containing sodium wastes is only treated in the permitted thermal oxidation unit.
- b. Only non-sodium contaminated equipment is cleaned in the wash tanks.
- c. Health and Safety concerns preclude the treatment of water reactive sodium wastes in the wash tank area.
- d. RMISP SJP's specifically call for prior treatment of sodium contaminated equipment in the thermal oxidation unit before cleaning in the wash tank area.

All appropriate precautions are taken to prevent the incidental occurrence of small amounts of sodium residues at the wash tanks.

C) OEPA COMMENT: Used solvents were mixed with waste oils and disposed of as non-hazardous used oil.

RMI RESPONSE: A sample of used oil is routinely tested by the disposal facility before an off-site shipment of oil occurs. Two waste oil samples were found to be contaminated with chlorinated solvents in August, 1990. The resulting shipments were properly labeled, manifested and transported as hazardous

1) UNPERMITTED ACTIVITIES (cont'd)

waste. RMISP investigated and rectified this situation by proper segregation of used oil and chlorinated solvent waste and by eliminating the use of all chlorinated solvents at the facility by May 8, 1991. RMISP now uses only a non-chlorinated solvent re-cycler (Safety Kleen or equivalent) for its on-site solvent use. All used oil sent for off-site disposal since the August, 1990 shipments have been identified via chemical analysis as non-hazardous waste only. RMISP conducted an additional training program for appropriate personnel on May 2, 1991 (see attachment #3). This training was in addition to the regular annual RCRA training conducted on January 17, 1991 and included a discussion on the proper segregation and labeling of oil and solvent wastes. See WASTE ANALYSIS PLAN, #19 below.

2) REPORTING NON-COMPLIANCE

OEPA COMMENT: RMISP did not report to the OEPA that the storage limits were exceeded at the thermal oxidation unit. Permit Conditions E.1(b), A.19, A.21 and A.22 .

RMI RESPONSE: Permit Condition E.1 cites the following:

- (a) Subject to the conditions of this permit, the Permittee shall store in containers only the following waste and shall not exceed the annual quantity specified: EPA Hazard No. D003, Annual Quantity of waste 3,600 lbs/yr.
- (b) The design capacity for container storage shall not exceed 660 gallons.

2) REPORTING NON-COMPLIANCE (cont'd)

Permit Condition A.19 states in part:

The permittee shall immediately report to the OEPA any non-compliance with this permit, R.C Chapter 3734 or the rules adopted thereunder, which non-compliance may endanger human health or the environment.

Permit Condition A.21 states in part:

The Permittee shall report to the OEPA all other instances of non-compliance not provided for in Condition A.19 at the time monitoring reports are submitted.

Although Permit Condition E.1(b) was exceeded for the total number of RMIMRP waste drums in storage, RMI does not believe that this non-compliance would "endanger human health or the environment" (Condition A.19) and require immediate reporting to the OEPA. RMI believes it complied appropriately with Condition A.21 in reporting the non-compliance. On March 12, 1991, RMI notified OEPA of the incident of non-compliance (see attachment #1). The letter states the overstock of RMIMRP sinter pot spoolpieces containing steel wool pads impregnated with sodium was due to difficulties in timely treating the pads which are stored in mineral oil. The letter goes on to state:

"Prior to thermal treatment, the mineral oil is drained from the steel wool pads to be re-used for further shipments. However, the residual mineral oil that remains inside the steel wool pads has created difficulties during thermal treatment. Three drums of sinter pot spoolpieces, which would routinely take one to two hours to thermally treat, because of the presence of mineral oil are now taking as much as eight hours to treat. The RMI Sodium Plant in addressing this situation has added an additional burn room shift specifically to deal with sinter pot spoolpieces. This shift at a minimum will treat three barrels of sinter pot spoolpieces

2) REPORTING NON-COMPLIANCE (cont'd)

per day. Additional barrels will be treated during normal burn room hours when not in use for routine treatments".

RMISP is pleased to report that this non-compliance was rectified by April 25, 1991 and that RMIMRP wastes stored at the RMISP before treatment do not exceed the permitted 12 drums.

Discussion of Sodium\Calcium (Na\Ca) Filter Sludge.

As part of the metallic sodium production process, the sodium is removed from the cell receivers into a sodium "container". The container is weighed and then the sodium is drained into the filtering system. The filter system is maintained under vacuum from the sodium railroad tank cars which pulls the sodium through a filtering device leaving behind a Na\Ca mixture (80% Na, 20% Ca). This Na\Ca "sludge" is removed from the filter system, placed into drums and used as a feed stock in a Downs "sludge" cell for further sodium production. The sludge containing drums are heated in an oven to re-liquefy the Na\Ca material for addition to the sludge cell. If the drummed material begins to excessively decompose upon heating, forming oxides, then the drum is cooled, blanketed with nitrogen and taken to the thermal oxidation unit for treatment. If the drummed material does not decompose upon heating, the sludge cell is fed the Na\Ca sludge along with a smaller than normal quantity of sodium chloride salt to produce sodium metal. As described above, the cell bath is a eutectic mixture and it requires an optimum of 61% calcium. The loss of some calcium with the sodium depletes the cells of

2) REPORTING NON-COMPLIANCE (cont'd)

calcium. The high calcium cell bath in the sludge cell is needed to add back to regular cells to maintain the proper Ca analysis. Except for infrequent decomposition to oxides, the Na\Ca sludge is always added to one of the 2 or 3 operating sludge cells.

The Na\Ca sludge and the sludge cells are an integral part of the sodium production process and are necessary to maintain proper calcium levels in all cells. The Na\Ca sludge then is an in-process intermediate material and not a waste.

On occasion, the Na\Ca sludge will show signs of oxidation or will be otherwise unsuitable for re-use at the time the drum is filled. The past practice of RMISP was to treat these drums the same as all other sludge drums and not classify them for burning until the drum was re-opened prior to heating and re-use. In the future, any drums which upon filling are judged unsuitable for use, will be immediately designated for burning.

RMISP instituted a log for both the RMIMRP wastes and the Na\Ca wastes for thermal treatment on April 26, 1991 (see attachment #4). The log includes pertinent information such as Manifest numbers, Type and amount of waste and accumulation start dates. See EFFECTIVE MANAGEMENT PRACTICES, #4 below and SPECULATIVE ACCUMULATION, #22 below.

3) EXPEDITIOUS CORRECTIONS

OEPA COMMENT: RMISP will be unable to quickly correct the backlog of hazardous waste drums in storage.

3) EXPEDITIOUS CORRECTIONS (cont'd)

RMI RESPONSE: RMISP is pleased to report that this non-compliance was rectified by April 25, 1991 and that RMIMRP wastes stored at the RMISP before treatment do not exceed the permitted 12 drums. RMIMRP currently has 18 drums of sodium wastes to be transferred to the RMISP for treatment. RMIMRP has filed a re-cycling plan with the OEPA (July, 1990) and expects in the near future to effectively manage all steel wool pad sodium wastes on-site rather than sending them to the RMISP for treatment in the thermal oxidation unit. The pads account for approximately two-thirds of the sodium waste sent from the RMIMRP. Tank car spoolpieces and pieces of sodium filled piping resulting from maintenance activities at the RMIMRP will continue to be treated at the RMISP.

4) EFFECTIVE MANAGEMENT PRACTICES

OEPA COMMENT: Employees must be trained to recognize situations which do not conform with the Part B permit.

RMI RESPONSE: RMISP conducted an additional training program for appropriate personnel on May 2, 1991 (see attachment #3). This training was in addition to the regular annual RCRA training conducted on January 17, 1991 and included but was not limited to the following topics: handling and storage of RMIMRP sodium wastes, Waste pile and thermal oxidation unit inspection forms, segregation of oil and solvent wastes, proper marking and labeling of waste drums.

5) OPERATING LOG

OEPA COMMENT: RMISP does not have an operating log for the storage of off-site wastes or the Na/Ca wastes for thermal treatment.

RMI RESPONSE: RMISP instituted a log for both the RMIMRP wastes and the Na/Ca wastes for thermal treatment on April 26, 1991 (see attachment #4). The log includes pertinent information such as Manifest numbers, Type and amount of waste and accumulation start dates.

6) MONITORING INFORMATION

OEPA COMMENT: Laboratory to include the testers name on all test result papers.

RMI RESPONSE: On April 25, 1991, RMI requested the Laboratory (Eckenfelder, Inc.) to include the analysts name on all future test reports. See attachment #5.

7) SAMPLE ANALYSIS

OEPA COMMENT: Laboratory to include pH results on all TCLP test result papers.

RMI RESPONSE: All past E.P Toxic or TCLP analyses included a pH test. On April 25, 1991, RMI requested the Laboratory (Eckenfelder, Inc.) to include the pH results on all future TCLP test reports. See attachment #5.

8) SUFFICIENT WASTE ANALYSIS

OEPA COMMENT: Waste analysis requires annual testing.

RMI RESPONSE: Each shipment of cell bath waste is analyzed by the off-site disposal facility. Cell bath waste was shipped approximately two times per month thus far in 1991. Samples of sodium product, Na/Ca sludge from a receiver and Na/Ca from a container as specified in the Part B permit "Waste Characteristics" (Section "C", page C-3a) were taken on April 24, 1991. RMISP will forward the results to the OEPA as soon as they are received.

9) INSPECTION PLAN

OEPA COMMENT: Non-compliance regarding inspections at drum storage area at the thermal oxidation unit.

RMI RESPONSE: RMISP conducted an additional training program for appropriate personnel on May 2, 1991 (see attachment #3). This training was in addition to the regular annual RCRA training conducted on January 17, 1991 and included but was not limited to the following topics: handling and storage of RMIMRP sodium wastes, Waste pile and thermal oxidation unit inspection forms, segregation of oil and solvent wastes, proper marking and labeling of waste drums.

See EFFECTIVE MANAGEMENT PRACTICES #4 above.

10) JOB DESCRIPTIONS

OEPA COMMENT: Job descriptions are not detailed enough and do not include the Traffic Manager.

RMI RESPONSE: RMISP has revised the job descriptions for Day Service Operator and the Day Service Foreman with additional detail on their respective hazardous waste functions and/or responsibilities. Also included is a job description for the Traffic Supervisor's hazardous waste responsibilities. Refer to attachment #6 for all revised job descriptions.

11) RELEASE OF HAZARDOUS WASTES TO THE SOIL

OEPA COMMENT: Cell shells were stored on the ground. These areas must be cleaned and tested to confirm the contamination has been properly removed.

RMI RESPONSE: RMISP addressed this item in the letter to OEPA (March 12, 1991, D.R. Micsky to OEPA, attachment #1) which stated in part:

"Another area of concern noted by Mark Bergman of the Ohio EPA was with empty cell cells from the Down's electrolytic dell process. Because of a downturn in production, more cells than normal have in recent weeks been taken out of service. When a cell is taken out of service, the cell is emptied of cell bath waste, the cells are then washed and the brick lining is removed, The cell bath waste contains Barium D005 and sometimes Lead D008. Because of the unusual number of cells being rapidly taken out of service, approximately 15 cell shells were moved to an outdoor storage area without being cleaned. To address this situation, RMI Sodium will immediately begin cleaning these cell shells before placing in storage. All cleaning of cell shells will be completed within 4 weeks."

11) RELEASE OF HAZARDOUS WASTES TO THE SOIL (cont'd)

To reiterate: only cell bath waste containing barium and possibly lead could have fallen onto the ground. It would not be expected that any sodium reactive waste would have been co-mingled with the cell bath waste. RMISP is pleased to report that all the above cell shells were cleaned of any residual cell bath waste by April 12, 1991. The soil area of concern was sampled on April 24, 1991 using the surficial soil sampling protocol from the RMISP RCRA Facility Investigation (RFI) report of June 28, 1990 (Section 3.3, attachment #7). RMISP will forward the results to the OEPA as soon as they are available.

See UNPERMITTED ACTIVITIES, #1B above.

12) CONTINGENCY PLAN AGREEMENTS

OEPA COMMENT: The Contingency Plan must contain documented agreements on arrangements with local emergency response authorities.

RMI RESPONSE: This item is addressed in a letter dated June 5, 1990 (M.C. Miller\RMI to M. Bergman\OEPA, attachment #8) which includes coordination agreements for emergency services from the following Emergency Response Agencies:

- a. Ashtabula County Medical Center
- b. Ashtabula County Emergency Management Agency
- c. Ashtabula County Sheriff's Office
- d. Ashtabula Township Fire Department

12) CONTINGENCY PLAN AGREEMENTS (cont'd)

e. City of Ashtabula Fire Department

f. Ohio State Highway Patrol, Ashtabula Post

These agreements will be formally incorporated into the RMISP Part B permit current revisions.

13) WASTE PILE

OEPA COMMENT: The current practice of lightly wetting the cell bath waste needs to be resolved through a written request to the OEPA and the HWFB.

RMI RESPONSE: The RMISP process requires a cell bath with the following composition: Sodium chloride - 36%, Calcium chloride - 61%, and Barium chloride - 3%. Cell bath waste has three components: Cell bath 30-60%, clay absorbent 15-30%, and water 10-45%. The clay material (Speedy Dri or equivalent) is added to the cell bath waste to eliminate a slip hazard caused by the hygroscopic properties of the calcium chloride constituent of the cell bath. The water portion of the waste is generally from atmospheric moisture absorbed by the cell bath. When the Third Land Ban Disposal Restrictions became effective in August of 1990 it was necessary to have the off-site disposal facility properly stabilize the cell bath waste before land disposal. The stabilization procedure includes mixing the cell bath waste with water and solidification agents. The cell bath waste was found to contain occasional residual pieces of the sodium product which would react with the water of stabilization. This type of

13) WASTE PILE (cont'd)

reaction was a possible safety hazard. Further investigation revealed that even though past composite sampling and analysis according to SW-846 had never detected its presence, some cell bath waste could contain infrequent pieces of entrained sodium. RMISP implemented improved process controls to minimize sodium loss to the cell bath waste. In addition, RMISP has found that consistent waste sizing (by low speed grinding if necessary) and subsequent light wetting of the cell bath waste on-site prevents any safety concerns presented by random pieces of sodium and actually facilitates the off-site stabilization. This wetting process does not present any hazard to the environment from contaminated run-off because the cell bath waste tightly binds the added water. RMISP internal tests show that cell bath waste can absorb an additional 10% of its own weight in water and still pass the paint filter test for the presence of free liquids. RMISP has been wetting the waste for several months and is currently installing a low speed grinder for consistent sizing.

RMISP will be submitting to the OEPA, under separate cover, a written request concerning the practice of wetting the cell bath waste. RMISP has taken the view that these occasional pieces of sodium product, though they present a potential safety concern, do not classify the cell bath as a reactive hazardous waste.

14) INSPECTION FORMS

OEPA COMMENT: RMI will immediately begin using the revised inspection form for the waste pile which includes the top of the chute.

RMI RESPONSE: RMISP is pleased to report that this item was corrected on the day the OEPA inspector (M. Bergman) noted it to RMI personnel. The revised form (see attachment # 9 for sample forms) was included in the additional training program conducted on May 2, 1991. See EFFECTIVE MANAGEMENT PRACTICES, #4 above.

15) CELL BATH WASTES

A) OEPA COMMENT: Cell shell spillage on the ground is a violation of the waste pile conditions.

RMI RESPONSE: RMISP addressed this item in the letter to OEPA (March 12, 1991, D.R. Micsky to OEPA, attachment #1) which stated in part:

"Another area of concern noted by Mark Bergman of the Ohio EPA was with empty cell cells from the Down's electrolytic cell process. Because of a downturn in production, more cells than normal have in recent weeks been taken out of service. When a cell is taken out of service, the cell is emptied of cell bath waste, the cells are then washed and the brick lining is removed. The cell bath waste contains Barium D005 and sometimes Lead D008. Because of the unusual number of cells being rapidly taken out of service, approximately 15 cell shells were moved to an outdoor storage area without being cleaned. To address this situation, RMI Sodium will immediately begin cleaning these cell shells before placing in storage. All cleaning of cell shells will be completed within 4 weeks."

To reiterate: only cell bath waste containing barium and possibly lead could have fallen onto the ground. It would not be expected that any sodium reactive waste would have been co-mingled with

15) CELL BATH WASTES (cont'd)

the cell bath waste. RMISP is pleased to report that all the above cell shells were cleaned of any residual cell bath waste by April 12, 1991. The soil area of concern was sampled on April 24, 1991 using the surficial soil sampling protocol from the RMISP RCRA Facility Investigation (RFI) report of June 28, 1990 (Section 3.3 attachment #7). RMISP will forward the results to the OEPA as soon as they are available.

See RELEASE OF HAZARDOUS WASTES TO THE SOIL, #11 above.

B) OEPA COMMENT: Devise a control procedure to assure that the cell bath hazardous waste under the cells is being regularly removed to the waste pile.

RMI RESPONSE: The cell bath that falls down to the first floor of the cell shop is not a waste but material that can be and is returned upstairs and added to operating cells. This is addressed in an internal letter from B. Wright\RMI to all employees (October 16, 1990, see attachment #10) which states in part:

"Beginning today, all Bath spills and Sodium spills are to be picked up immediately by the employee that has the spill. This will include spills down to the first floor. Sodium is to be placed in a clean, dry container and taken to the Burn room. Bath is to be picked up in a clean, dry container and taken back up to the cell it came from."

(Emphasis added)

Material that is dirty, etc and cannot be returned to the

15) CELL BATH WASTES (cont'd)

operating cells is swept up on a routine basis and taken to the waste pile. Refer to the "Hazardous Waste Log - South Chute" (attachment #11) which records the date, pounds of cell bath and corresponding number of wheelbarrow transfers of cell bath to South Chute for the period August 20, 1990 through April 16, 1991. Because the generation rate tends to be somewhat variable, the frequency of sweeping varies accordingly. Due to the hygroscopic nature of the waste, the importance of keeping water and sodium separated in the building and the fact that water is not used in the process, the in-process cell bath does not present a danger of contaminated run off.

16) STORED QUANTITIES

OEPA COMMENT: RMISP exceeded the annual storage quantity of 3,600 pounds per year due to on-site Na/Ca sludge and off-site RMIMRP sodium wastes.

RMI RESPONSE: At any one time during 1990 through April, 1991, the RMISP would have had on-site a maximum of 2000 pounds of RMIMRP sodium wastes. Although these wastes would have been stored in greater than the twelve drums allowed in the permit (see REPORTING NON-COMPLIANCE, #2 above), the total weight of the RMIMRP wastes was much less than the Permit's 3,600 limit for storage. Except for infrequent decomposition to oxides, the RMISP Na/Ca sludge is an in-process intermediate which is always added to one of the 2 or 3 operating sludge cells. The Na/Ca

16) STORED QUANTITIES (cont'd)

sludge and the sludge cells are an integral part of the sodium production process and are necessary to maintain proper calcium levels in all cells. Therefore the Na/Ca sludge quantities on-site at the RMISP would not be considered in the Permit's 3,600 pound storage limit. RMISP issued a written directive (letter B. Wright to All Supervisors, April 24, 1991, attachment #12) on the proper storage and labeling of Na/Ca sludge drums. Refer to attachment #13 for photos of the drum storage areas. The storage and labeling requirements were included in the additional training program conducted on May 2, 1991.

See EFFECTIVE MANAGEMENT PRACTICES, #4 above and REPORTING NON-COMPLIANCE, #2 above.

17) CLOSED STORAGE CONTAINERS

OEPA COMMENT: Lids must be maintained on drums of Na/Ca sludge to be treated in the thermal treatment unit.

RMI RESPONSE: RMISP issued a letter (B. Wright to All Supervisors, April 24, 1991, attachment #12) that directs lids to be placed on all Na/Ca sludge drums awaiting treatment in the thermal treatment unit except when adding or removing waste. The requirement for lids was included in the additional training program conducted on May 2, 1991.

See EFFECTIVE MANAGEMENT PRACTICES, #4 above.

18) THERMAL TREATMENT UNIT

OEPA COMMENT: The inspection form must be revised to include daily inspection of the thermal treatment unit for leaks, spills and fugitive emissions.

RMIS RESPONSE: RMISP has revised the inspection form for the thermal treatment unit to include spills, etc (see attachment #14). RMISP also issued a letter (B. Wright to J. Clements "Control Room Housekeeping", April 24, 1991, attachment #15) that directs the thermal treatment unit control room to be broom cleaned at the end of each operating shift. See EFFECTIVE MANAGEMENT PRACTICES, #4 above.

19) WASTE ANALYSIS PLAN

OEPA COMMENT: The waste analysis plan must be updated to include the spent solvents generated from the maintenance operation.

RMIS RESPONSE: A sample of used oil is routinely tested by the disposal facility before an off-site shipment of oil occurs. Two waste oil samples were found to be contaminated with chlorinated solvents in August, 1990. The resulting shipments were properly labeled, manifested and transported as hazardous waste. RMISP investigated and rectified this situation by proper segregation of used oil and chlorinated solvent waste and by eliminating the use of all chlorinated solvents at the facility by May 8, 1991. RMISP now uses only a non-chlorinated solvent re-cycler (Safety Kleen or equivalent) for its on-site

19) WASTE ANALYSIS PLAN (cont'd)

solvent use. All used oil sent for off-site disposal since the August, 1990 shipments have been identified via chemical analysis as non-hazardous waste only. RMISP conducted an additional training program for appropriate personnel on May 2, 1991 (see attachment #3). This training was in addition to the regular annual RCRA training conducted on January 17, 1991 and included a discussion on the proper segregation and labeling of oil and solvent wastes. Since RMISP has eliminated the use of chlorinated solvents from the facility the waste analysis plan does not require modification to include these solvents. See UNPERMITTED ACTIVITIES, #1C above.

20) OPERATING RECORD

OEPA COMMENT: The operating record must include copies of LDR notifications from the off-site wastes from RMIMRP.

RMI RESPONSE: RMISP is pleased to report that an appropriate Land Disposal Restriction Notification Form was instituted on April 26, 1991 and will be included with all future shipments of waste from the RMIMRP (see attachment #16).

21) ANNUAL WASTE ANALYSIS

OEPA COMMENTS: The 1990 waste analysis testing of on-site wastes was not conducted as required. The on-site waste streams which need to be tested should be done as soon as possible.

RMI RESPONSE: Each shipment of cell bath waste is analyzed

21) ANNUAL WASTE ANALYSIS (cont'd)

by the off-site disposal facility. Cell bath waste was shipped approximately two times per month thus far in 1991.

Samples of sodium product, Na\Ca sludge from a receiver and Na\Ca from a container as specified in the Part B permit "Waste Characteristics" (Section "C", page C-3a) were taken on April 24, 1991. RMISP will forward the results to the OEPA as soon as they are received.

See SUFFICIENT WASTE ANALYSIS, #8 above.

22) SPECULATIVE ACCUMULATION

OEPA COMMENT: There were no inventory records or operating logs to provide documentation that more than 75% of Na\Ca sludge drums had been reprocessed within the past year.

RMI RESPONSE: Except for infrequent decomposition to oxides, the Na\Ca sludge is always added to one of the 2 or 3 operating sludge cells. The Na\Ca sludge and the sludge cells are an integral part of the sodium production process and are necessary to maintain proper calcium levels in all cells. The Na\Ca sludge then is an in-process intermediate material and not a waste being accumulated speculatively. RMISP maintains detailed operating records on the amount of Na\Ca sludge in the process. This is evidenced by the daily "drawn and fed" sludge statistics that are part of cell room operation (see "Sludge Statistics" report through April 18, 1991 attachment #17).

See REPORTING NON-COMPLIANCE, #2 above.

23) REVISIONS OR MODIFICATIONS

OEPA COMMENT: Any changes in RMISP's operation which deviate from the approved Part B must be formally submitted to the HWFB.

RMI RESPONSE: RMISP will formally submit to the HWFB, all revisions to the Part B made necessary by operational or personnel changes.

24) HAZARDOUS WASTE LABELS

OEPA COMMENT: Once a drum becomes empty, the employees must remove the labels which indicate the contents are hazardous.

RMI RESPONSE: RMISP issued a letter (B. Wright to J. Clements "Hazardous Waste Labels", April 24, 1991, attachment #18) that directs all appropriate employees to remove hazardous waste labels from the drums when emptied. Proper drum labeling was included in the additional training conducted on May 2, 1991. See EFFECTIVE MANAGEMENT PRACTICES, (training) #4 above.

25) WASTE PILE

OEPA COMMENT: Non-waste material (cigarette butts) in the cell bath waste pile. Side plate on the western wall of the waste pile bin had a gap in the seam.

RMI RESPONSE: RMISP placed a "Cell Bath Only" sign at the entrance to the waste pile on April 26, 1991 (see photo, attachment #19). Proper waste segregation was included in the additional training conducted on May 2, 1991 (see EFFECTIVE MANAGEMENT PRACTICES, #4 above). RMISP issued a letter

25) WASTE PILE (cont'd)

(B. Wright to R. Senra, "Repair of South Chute Area", March 8, 1991, attachment #20) that addresses the repair of the cell bath waste chute seams.

26) DRIP PANS

OEPA COMMENT: Recommend that drip pans be placed under drums with spigots.

RMI RESPONSE: Drip pans were fabricated and installed under the noted hydraulic and lubricating oil drums immediately upon recommendation by the inspector (March 5, 1991).



SODIUM PLANT
STATE ROAD & EAST 6TH STREET
P.O. BOX 680
ASHTABULA, OHIO 44004-0680
216/997-6141
FAX 216/992-7038

March 12, 1991

EXPRESS MAIL

Ohio Environmental Protection Agency
Office of Emergency Response
P.O. Box 1049
1800 Water Mark Drive
Columbus, OH 43260-0149

Dear Sir:

Subject: RMI Titanium Company - Sodium Plant
US EPA ID Number OHD000810242
Ohio Permit Number 02-04-0584

Notice of Noncompliance

An incident of noncompliance was noted on February 25, 1991 by Mark Bergman of the Ohio EPA and RMI Sodium Plant personnel. The RMI Sodium Plant accepts D003 waste sodium in sinter pot spoolpieces for thermal treatment from the RMI Metals Reduction Plant. This practice began in June, 1990.

The RMI Sodium Plant's Part B Permit specifies that the design capacity for container storage shall not exceed 660 gallons, which is twelve 55 gallon drums. The RMI Sodium Plant as of February 25, 1991 had 71 drums of sinter pot spoolpieces on site to be thermally treated. This overstock of drums to be treated, is a result of the difficulties experienced in the thermal oxidation of the sinter pot spoolpieces. The sinter pot spoolpieces contain a sodium impregnated steel wool pad which is removed from the spoolpieces and stored in mineral oil filled 17-C steel drums at the point of generation.

Prior to thermal treatment, the mineral oil is drained from the steel wool pads to be reused for further shipments. However, the residual mineral oil that remains inside the steel wool pads has created difficulties during thermal treatment. Three drums of sinter pot spoolpieces, which would routinely take one to two hours to thermally treat, because of the presence of mineral oil are now taking as much as eight hours to treat. The RMI Sodium Plant in addressing this situation has added an additional burn room shift specifically to deal with sinter pot spoolpieces. This shift at a minimum will treat three barrels of sinter pot spoolpieces per day. Additional barrels will be treated during normal burn room hours when not in use for routine treatments.



Ohio EPA
March 12, 1991
Page 2

With this additional thermal treatment time devoted to sinter pot spoolpieces, the RMI Sodium Plant will achieve compliance with the number of sinter pot spoolpieces in approximately 4 to 6 weeks.

Another area of concern noted by Mark Bergman of the Ohio EPA was with empty cell shells from the Down's electrolytic cell process. Because of a downturn in production, more cells than normal have in recent weeks been taken out of service. When a cell is taken out of service, the cell is emptied of cell bath waste, the cells are then washed and the brick lining is removed. The cell bath waste contains Barium D005 and sometimes Lead D008. Because of the unusual number of cells being rapidly taken out of service, approximately 15 cell shells were moved to an outdoor storage area without being cleaned. To address this situation, RMI Sodium will immediately begin cleaning these cell shells before placing in storage. All cleaning of cell shells will be completed within 4 weeks.

Thank you for your attention to this matter. If you should have any questions or comments, please contact me at 216-544-7802.

Sincerely,

A handwritten signature in dark ink, appearing to read "David R. Micsky", is written over a horizontal line.

David R. Micsky
Environmental Engineer

DRM/rmw

cc: Mark Bergman, Ohio EPA
W. J. McCarthy, RMI
D. P. Korb, RMI
R. L. Mason, RMI

Burning Receivers
Production

CODE NO.

PDS #2

Page 1 of 2

ARTMENT

OPERATIONS (Steps)	PROTECTIVE APPAREL	PROCEDURES	HAZARDS (Safety Contacts)
<p>1. Put small scow & rack in place</p> <p>2. Move the receiver to Burning room</p> <p>3. Inspection</p> <p>4. Strip receiver</p> <p>5. Remove shell</p> <p>6. Remove plugcock</p> <p>7. Set receiver on rack & scow</p>	<p>Nomex hood</p> <p>long underwear</p> <p>safety shoes</p> <p>leather jacket</p> <p>bib overalls</p> <p>mitts</p> <p>faceshield</p>	<p>1. Use fork truck or worksaver & place small scow in burning room</p> <p>2. Remove receiver from oven with chain falls. Set on wagon pull to the door near the fork lift. Take receiver to the burning room.</p> <p>3. Inspect tools for wear.</p> <p>4. Purge receiver w/nitrogen Remove the top plate from riser. Remove the top plug cock from cover. Remove all the nuts from cover with a cold chisel remove nuts from shell of bowl. Remove cover & set in vertical position in the parts basket.</p> <p>5. Roll up shell and set on pallet for reuse</p> <p>6. Roll receiver over & remove 4 bolts from plugcock plate. Remove plugcock & plate Set plugcock on press table.</p> <p>7. With fork truck, lift receiver and set on rack & scow in burning room. Close doors, start scrubber (PDS-1) ignite torches, proceed to burn receiver.</p>	<p>Possible burns</p> <p>Use caution removing top plate of receiver oxides may form and possible blow up.</p>

DATE COMPLETED

APPROVED BY

Brian Wright

REVIEW DATE

7-10-90

COMPLETED BY

Jim Atzenis

DATE APPROVED

7/11/90

REVISION DATE

7/11/90

**RMI COMPANY
SAFE JOB PROCEDURE**

Burning Receivers

CODE NO. PDS #2

Page 2 of 2

ARTMENT Day Service

OPERATIONS (Steps)	PROTECTIVE APPAREL	PROCEDURES	HAZARDS (Safety Contacts)
<p>8. Remove burned receiver to wash area</p>	<p>Nomex hood long underwear, safety shoes Leather jacket Bib overalls faceshield mitts</p>	<p>8. With fork lift, remove burned receiver from scow. Let the receiver cool down. After receiver has cooled, remove receiver to wash tank area and set in wash tank for washing.</p>	

DATE COMPLETED

APPROVED BY

Brian Wright

REVIEW DATE

7-10-90

COMPLETED BY

Jim Atzenis

DATE APPROVED

7/11/90

REVISION DATE

7/11/90

OPERATION
Steps

**RMI COMPANY
SAFE JOB PROCEDURE**

Sodium Riser Pumps Decontamination
Department Day Service

CODE NO. _____ PDS# 11 Page 1 of 3

OPERATIONS (Steps)	PROTECTIVE APPAREL	PROCEDURES	HAZARDS (Safety Contacts)
1. Pumps back to burning room	Nomex Hood, Leather jacket & aprons over denim Nomex Underwear, faceshields w/ goggles moleskin mitts	1a. Take day service fork truck to filter area b. Pickup rack with pump tube ends facing away from driver c. Take pump rack to burning room	USE CAUTION W/TRUCK NOT TO HIT FILTER BEWARE OF SODIUM & SODIUM OXIDES
2. Burn pumps		2a. Set the pumps rack on the scow w/ open ends of tube facing the steel wall in the burning room b. Burn pumps using kerosene torch make sure all sections of pump are heated. c. Put the torch on the open end of pump till flame exhausts from bottom. Repeat for each pump.	MAKE SURE ENDS ARE FACING AWAY FROM PERSONNEL
3. Blow nitrogen through pump		3a. Remove rack from room after cooled b. Place nitrogen hose on fitting of pumps. c. Step away from pump & blow nitrogen through each pump. d. Attach tag to pump.	MAKE SURE ENDS ARE FACING AWAY FROM PERSONNEL PUMP ENDS SHOULD FACE AWAY FROM PERSONNEL IN AREA STAY OUT FROM UNDER LOAD!
4. Pump rack to wash area.		4a. Use forklift to take pump rack to Day Service Wash area.	
5. Pump rack in wash tanks		5a. Lift pump rack with crane & place in #6 wash tank for a period of 16 to 24 hours.	

DATE COMPLETED 11/29/88 APPROVED BY Brian Wright REVIEW DATE _____
COMPLETED BY B. Wright DATE APPROVED 11/30/88 REVISION DATE 7/10/90

IS COMPLETED 11/29/88

PREPARED BY B. Wright

AIR TO BLOW
throughRMI COMPANY
SAFE JOB PROCEDUREJOB Sodium Riser Pumps Decontamination CODE NO. PDS# 11 Page 2 of 3
DEPARTMENT Day Service

OPERATIONS (Steps)	PROTECTIVE APPAREL	PROCEDURES	HAZARDS (Safety Contacts)
3. Remove Conveyor and Boot. Take pump to over.		<p>5b. Raise pump rack from #6 wash tank leaving suction end of pumps submerged in tank.</p> <p>6a. Insert long steam lance into discharge end of pump. b. Turn steam on when personnel are away from pump. c. Step up to tank and observe bubbling agitation from suction side of pump. d. Repeat procedure for each pump. e. Remove rack from tank & place on ground. f. Roll rack to east end of day service. g. Place rack so pump ends face south.</p> <p>7a. Place long curved water pipe into discharge side of pump. b. Step away from pump and turn water on. c. Observe water coming out of suction end of pump repeat procedure for each pump d. Turn water off and remove water pipe</p> <p>8a. Hook up air hose to nitrogen fitting on pump.</p>	POTENTIAL FOR SODIUM EXPLOSION EXISTS

DATE COMPLETED Day 11/29/88 APPROVED BY Brian Wright REVIEW DATE _____
COMPLETED BY B. Wright DATE APPROVED 11/30/88 REVISION DATE 7/10/90
(Steps) APPROVED

RMI COMPANY
SAFE JOB PROCEDURE

DATE COMPLETED BY Sodium Riser Pump Decontamination CODE NO. PDS #11 Page 3 of 3
DEPARTMENT Day Service

OPERATIONS (Steps)	PROTECTIVE APPAREL	PROCEDURES	HAZARDS (Safety Contacts)
9. Air to blow through		9. If air does not blow through, then repeat steps 1 - 8.	INITIAL TAG AFTER EACH STEP WHERE REQUIRED
10. Cut pumps		10. NOTE: If 2nd time thru cut pump into two pieces, set cut parts in basket or bar basket. (Day Service will cut pumps)	
11. Send to Cell Maintenance		11. Take pumps to cell maintenance for checking	
12. Take pump to oven		12a. Place clean pumps in cold side of oven (Left side)	
		b. Check temperature of oven to assure proper temperature.	
			OVEN IS LABELED: COLD TO SOUTH HOT TO NORTH

DATE COMPLETED 1-30-90 APPROVED BY Brian Wright REVIEW DATE 7-10-90
COMPLETED BY J. Atzemis DATE APPROVED 11-1-90 REVISION DATE 10-30-90

ADDITIONAL RCRA TRAINING

General RCRA

- I. RMI - Sodium Plant and RCRA
 - A) The Ohio EPA has control of RCRA in Ohio
 - B) RMI - Sodium Plant is a large quantity generator of hazardous waste per month
 - C) RMI - Sodium Plant also holds a Part B permit for Treatment, Storage, and Disposal of hazardous waste. TSD Facility
 - 1) Treatment - Na Ca sludge
 - MRP - spoolpieces
 - MRP - pads
 - 2) Storage - MRP - spoolpieces
 - MRP - pads
 - Waste pile
 - D) RMI - Sodium Plant generates the following hazardous waste on site
 - 1) Cell bath waste - TCLP toxic for Ba and Pb
 - 2) Waste Na/Ca Sludge - Reactive with water
 - 3) Waste sulfuric acid - exempt from RCRA because of elementary neutralization done on site
 - 4) Waste oil - F001 - F002 - contaminated with chlorinated solvents
Waste solvents must never be mixed with used oil. RMI - Sodium Plant is in the process of removing all chlorinated solvents from plant and vendor chosen to provide recyclable only solvents
- II. Cell Bath Waste
 - A) RMI - Sodium Plant Cell Bath Waste is considered a RCRA Hazardous Waste because it contains Ba and Pb in higher concentrations than the TCLP limits
 - B) TCLP toxicity characteristic leaching procedure
 - 1) Explain TCLP
 - C) Importance of waste minimization procedures
 - 1) Return of bath and sodium to the cell
 - a) generates less hazardous waste
 - b) cost savings to company
 - D) No water present under cell room
 - 1) Safety concern for workers in area
 - 2) Barium or lead present in cell bath waste may leach out
 - E) South Chute
 - 1) Definition in Part B permit
 - 2) No other material is to be placed in chute
 - 3) Clean up of material that has spilled out of chute
 - 4) No free water in chute
 - 5) Logs of South Chute (show overhead)
 - F) Cell Shells
 - 1) Problems associated with placing unclean cell shells on ground
 - a) Ba and Pb leaching out of bath
 - 2) Review proper procedures for cleaning
 - 3) Restate no cell shells or any other equipment should be removed from cleaning area prior to cleaning.

III. Burn Room (Thermal Treatment Unit)

- A) Review Part B permit and regulations regarding the burn room.
- B) Treat Reactive Waste
 - 1) When is sodium a waste?

Metals Plant Waste

- A) Spoolpieces and Pads
 - 1) 12 drums total on site
 - 2) Must be burned within a few days
 - 3) Drums must be stored in designated area
 - 4) Log - drums must be tracked and have a count and location at all times.

Sludge Drums

Storage - must be stored in the proper locations

Full sludge drums - Not hazardous waste. In process material.

Tagged with a red tag.

Empty sludge drums - not hazardous waste. Drums will be reused.

Green tags.

Drums to be burned - hazardous waste. Must have hazardous waste sticker.

Burn Room Log

- A) Explain importance of accuracy of logs
- B) Burn room must be kept clean
 - 1) Note addition to burn room log (show overhead)

IV. Waste Oil

- A) No Mixing of Wastes
 - 1) Problems associated with.
- B) Satellite Storage Drum
 - 1) Location and what should be placed in the drum.
- C) Introduction of Safety Kleen process and how it works.
- D) Explain program and stress importance of removal and discontinued use of all chlorinated solvents on RMI - Sodium Plant

V. Question and Answer Period

- A) Stress importance of following procedures when dealing with hazardous waste and all waste.

RAINER

DAVID R Micky

RMI Sodium Plant

RCRA Training Roster

5/2/91

8:00 AM

Name	Signature	Job Title
Doug Bibler	Doug Bibler	Shift Foreman
Norman Fritzsche		Day Service
Carl B. Udell	CARL B UDell	SHIFT FORMAN
Walter Geronzi		DAY SERVICE OPR
ART Thompson		DAY Service
Geat Most		DAY Service
Ralph Sordings		Day Service
Jack Gray	Jack Gray	Day Service

RMI Sodium Plant
RCRA Training Roster

5/2/91
10:00 AM

TRAINER: DAVID R MICKY

<u>NAME</u>	<u>SIGNATURE</u>	<u>JOB TITLE</u>
Linda Merriman	Chula D. Merriman	Traffic Supervisor
Paul Savel	Paul Savel	Prod Supervisor
Gordon Puck	Gordon Tack	Maint Supervisor
BILL MASON	William R Mason	LEAD MAN YARD
Clint Damon	Clint Damon	Solar
LARRY GASCH	[Signature]	LABOR
JACK BREKER	Jack Breker	Prod. Super.
BILL ROBINSON	Bill Robinson	TRASH SUPER

RMI Sodium Plant RCRA TRAINING Roster

5/2/91
1:00 PM

TRAINER: DAVID R HICKY

<u>NAME</u>	<u>SIGNATURE</u>	<u>JOB TITLE</u>
JEFFRY W. CLEMENTS	<i>Jeffrey W. Clements</i>	Supervisor
James Atzenis	<i>James Atzenis</i>	Supervisor
BRIAN WRIGHT	<i>Brian Wright</i>	Production Superintendent
GARY L. STEJENS	<i>Gary L. Stejens</i>	ELECTRICAL SUPERVISOR

HAZARDOUS WASTE

FEDERAL LAW PROHIBITS IMPROPER DISPOSAL

IF FOUND, CONTACT THE NEAREST POLICE, OR
PUBLIC SAFETY AUTHORITY, OR THE
U.S. ENVIRONMENTAL PROTECTION AGENCY

PROPER D.O.T. SHIPPING NAME SODIUM UN OR NA# 1428

GENERATOR INFORMATION:

NAME RMT

ADDRESS STATE RD.

CITY ASHTABULA STATE OH ZIP 44004

EPA ID NO. OH D00810242 EPA WASTE NO. D007

ACCUMULATION START DATE _____ MANIFEST DOCUMENT NO. _____

HANDLE WITH CARE
CONTAINS HAZARDOUS OR TOXIC WASTES

STYLE WM-8

11

[illegible]

Burning Room
Activity.

Start Feb 4/91

[illegible]



P. O. BOX 269
1000 WARREN AVENUE
NILES, OHIO 44448-0269
FAX 216/544-7796

April 25, 1991

Mr. Rich Davis
Eckenfelder Inc.
227 French Landing Drive
Nashville, Tennessee 37228

Dear Mr. Davis:

Re: TCLP Data Reporting

During a recent Ohio EPA inspection it was noted by the OEPA inspector that all samples analyzed for TCLP parameters must include the following information on the reporting sheet:

- A) pH data; initial pH
 mls of acid added
 final pH
- B) Analyst name who performed each test

Therefore, RMI requests that any sample analyzed for TCLP parameters from all RMI Titanium Company plants include the above data on the analytical report.

Thank you for your attention to this matter. If you should have any questions, please call me at (216) 544-7802.

Sincerely,

A handwritten signature in cursive script, reading "David R. Micsky".

David R. Micsky
Environmental Engineer
Environmental Affairs

DRM:mck

bc: R. L. Mason
 R. N. Brosius
 L. Hanek
 J. Petrarca
 E. Marsh
 D. Sebest

EMPLOYEE NAME: _____

JOB TITLE: Day Service Operator

JOB DESCRIPTION:

Primary function: Clean sodium cell parts, copper busswork, catwalk and cell room floor.

Tools & Equipment: Air guns, steam hose and lance, floor scarifying machine, hammer, wrenches, bars, forklift, truck.

Materials: Cell bath, sodium, steam, air.

Working Procedure:

1. Chip floors with air gun.
2. Operate floor scarifying machine.
3. Steam cells.
4. Knock down bath from copper busswork.
5. Burn receivers, containers and other contaminated equipment and fill out burning room log.
6. Wash and steam contaminated equipment.
7. Clean cell room, catwalk, walls and behind cells.
8. Clean exhaust duct.
9. Clean tanks.
10. Clean gas lines.
11. Open up plugged cooling water coils on cells.
12. Replace water hoses as required.
13. Deliver speedy dri to shop.
14. Straighten air pipes.
15. Clean up cell bath under cells on 1st floor

The day service operator does the general cleaning of most equipment, and of the area in the Production Department.

- He is required to use the following tools at various times:

1. Broom
2. Shovel
3. Air Hammer
4. Breaking Bar
5. One and two wheeled wheelbarrows
6. Mechanical floor scarfing machine
7. Steam lance

- Work is strenuous and requires lifting up to 75 pounds.
- Work in confined areas of the plant.
- Operate a lift truck
- Wear protective safety equipment such as: face mask, goggles, leather suits, hard hats, and respirators.
- Use of slings and chains for hooking up and hoisting with an overhead crane.

DAY SERVICE FOREMAN

DUTIES AND RESPONSIBILITIES

- (A) Know and understand operating instructions, safety rules and union contract.
- (B) Teach operators the operating procedures and safety rules of any job they are assigned.
- (C) Hold safety meetings, investigate accidents and make out accident reports.
- (D) Write work orders and follow through to their completion.
- (E) Keep daily inventory of sludge.
- (G) Check cell water circuits daily, blow out, repair or replace hose, valves or trees as required.
- (H) Maintain first floor louvers.
- (I) See that bath spills are cleaned from cells and the floor daily. Record cell bath to south chute daily.
- (J) See that first floor of the cell room is maintained daily in a clean and orderly manner.
- (K) Maintain both Kinney Strainers and water system.
- (L) Maintain supply of soda ash. Order as required. Maintain a supply in the proper containers located on the first and second floors of the cell room and the first and second floors of the sodium filter area.
- (M) Steam all copper and cells as required.
- (N) Have steam put on or taken off cell bases as directed.
- (O) Have scrubber duct work cleaned as required. Report condition and keep record.
- (P) Have walls, building steel, catwalk, exhaust and chlorine ducts, filter area piping, salt conveyors, etc., cleaned as required. Chip floors.
- (Q) Responsible for Wash Tank and Burner Room Operation.
 - 1. Exhaust fans and duct work
 - 2. Spray booth and heat exchanger.
 - 3. Wash tanks, settling tank including water and steam piping and valves, drain lines, steam lances and necessary hoses.
 - 4. Burner Room including scows and other necessary equipment.
 - 5. Receiver oven including electric heaters and nitrogen purge.

- (R) Maintain sufficient supply of kerosene for burner room..
- (S) Responsible for the cleaning and inspection of all contaminated equipment including cell tools, ticklers, smoke covers, collectors, gauges, poke down rods, sludge barrel covers, domes, gas lines, from traps etc, and for maintaining a sufficient supply. Steaming sludge rollers.
- (T) Responsible for disposal of sodium scrap from equipment.
 - 1. Cell receivers.
 - 2. Molding receivers and coils
 - 3. Sodium pipe lines.
 - 4. Sodium barrels and drums.
 - 5. Sodium shop spills.
 - 6. Sodium receivers and coils.
 - 7. Filter units, piping, charge pipes and valves.
 - 8. Sodium containers.
 - 9. Sludge conveyors.
 - 10. Scrap bailed from cells.
 - 11. Scrap from molding.
 - 12. Tank car valves, eductor pipes, dome plates or sodium scrap from tank car cleaning.
 - 13. Other equipment as required.
- (U) Responsible for burning room including buildings, piping, valves, hoses, tools, safety signs and other equipment. Take necessary preventative measures in cold weather to prevent freezing of steam and water lines.
- (V) Responsible for hot oil systems.
- (W) Keep daily time records including overtime of Day Service and Cell Cleaners.
- (X) Cooperate and communicate with other foreman and departments.
- (Y) Maintain good housekeeping standards in all areas of responsibility.
- (Z) Maintain record of daily burning
- (AA) Take week end, holiday or night call as scheduled.
- (BB) Relieve other foreman as directed.
- (CC) Responsible for cell building roof.
- (DD) The Day Service foreman is fully responsible for the indoctrination and training of all new employees assigned to his shift.

DO NOT PASS THIS RESPONSIBILITY OFF ONTO SOMEONE ELSE.
- (EE) The Day Service Foreman's immediate supervisor is the manager of Production Department, but he may have to receive instructions and orders or instruction to his fellow foreman. In either case they should be carried out to insure smooth operation of the process.